

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-94 previously cancelled

95. **(Currently Amended)** A method of producing an amplified broadband optical signal, said method comprising:

dividing an optical signal at a predetermined wavelength into a first beam having a wavelength less than the predetermined wavelength and a second beam having a wavelength greater than said predetermined wavelength;

directing said first beam to a Raman amplifier;

directing said second beam to a rare earth doped amplifier; **[and]**

receiving at the rare earth doped amplifier at least a second pump wavelength that is substantially different than a first pump wavelength received by the Raman amplifier; and

combining said first and second beams to produce an amplified broadband optical signal.

96. **(Previously Presented)** The method of claim 95, wherein said rare earth doped amplifier is an erbium-doped fiber amplifier.

97. **(Previously Presented)** The method of claim 95, wherein the Raman amplifier amplifies and spectrally broadens the first beam and the rare earth doped amplifier amplifies and spectrally broadens the second beam.

98. **(Previously Cancelled)**

99. (Currently Amended) A broadband amplifier, comprising:
a splitter operable to be coupled to an input fiber, the splitter splitting an optical signal into at least a first optical signal wavelength and a second optical signal wavelength;
one or more Raman amplifiers coupled to the splitter, at least one of the Raman amplifiers receives a first pump wavelength;
one or more rare-earth doped optical amplifiers coupled to the splitter, at least one of the rare-earth doped amplifiers receives a second pump wavelength, wherein the second pump wavelength is substantially different than the first pump wavelength; and
a combiner coupled to the Raman amplifier and the rare-earth doped optical amplifier, the combiner combining at least the first optical signal wavelength and the second optical signal wavelength into an optical signal for communication to an output fiber operable to be coupled to the combiner.

100. (Previously Presented) The amplifier of claim 99, wherein the splitter directs the first wavelength to the Raman amplifier and the second wavelength to the rare-earth doped optical amplifier.

101. (Previously Cancelled)

102. **(Currently Amended)** A broadband amplifier, comprising:
a splitter operable to be coupled to an input fiber, the splitter splitting an optical signal into at least a first wavelength and a second wavelength;
a first amplifier coupled to the splitter;
a second amplifier coupled to the splitter, wherein a first pump wavelength associated with [of] the first amplifier is larger than a second pump wavelength associated with [of] the second amplifier; and
a combiner coupled to the first amplifier and the second amplifier, the combiner combining at least the first wavelength and the second wavelength into an optical signal for communication to an output fiber operable to be coupled to the combiner.

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103. **(Currently Amended)** A broadband amplifier, comprising:
a splitter operable to be coupled to an input fiber, the splitter splitting an optical signal into at least a first wavelength and a second wavelength;
a distributed gain medium coupled to the splitter and operable to receive at least a first pump wavelength, the distributed gain medium providing gain through a third order non-linearity;
one or more rare-earth doped amplifiers coupled to the splitter and operable to receive at least a second pump wavelength, wherein the second pump wavelength is substantially different than the first pump wavelength; and
a combiner coupled to the distributed gain medium and the rare earth doped optical amplifier, the combiner combining at least the first wavelength and the second wavelength into an optical signal for communication to an output fiber operable to be coupled to the combiner.

104. **(Previously Presented)** The amplifier of claim 103, wherein the splitter directs the first wavelength to the distributed gain medium and the second wavelength to the rare earth doped optical amplifier.

Claims 105-158 previously cancelled.
